

Rabbit SIRT7 Polyclonal Antibody | anti-SIRT7 antibody

SIRT7 Antibody

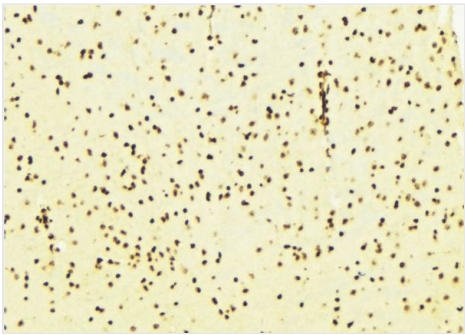
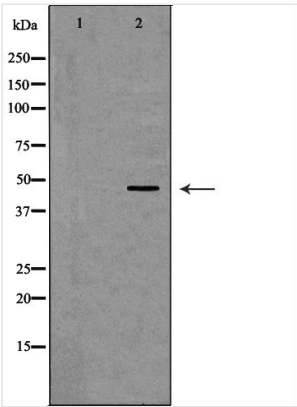
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA325943	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

SIRT7; Polyclonal Antibody; SIRT7 Antibody; NAD dependent deacetylase sirtuin 7; NAD dependent protein deacetylase sirtuin 7; NAD-dependent protein deacetylase sirtuin-7; Regulatory protein SIR2 homolog 7; Silent mating type information regulation 2 homolog; Silent mating type information regulation 2 S.cerevisiae homolog 7; SIR2 L7; SIR2 like protein 7; Sir2 related protein type 7; SIR2; S.CEREVISIAE; HOMOLOG-LIKE 7; SIR2-like protein 7; SIR2L 7; SIR2L7; SIR7_HUMAN; SIRT 7; Sirtuin 7; Sirtuin type 7; Sirtuin7; anti-SIRT7 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	SIRT7 antibody detects endogenous levels of total SIRT7
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	400
Applicable Applications for anti-SIRT7 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human SIRT7
Subcellular Location	Cytoplasm. Nucleus, Nucleolus. Located close to the nuclear membrane when in the cytoplasm. Associated with chromatin. Associated with rDNA promoter and transcribed region. Associated with nucleolar organizer regions during mitosis.
Predicted Cross Reactivity	Bovine, Dog
Similarity	Bovine (93%), Dog (93%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IHC (Immunohistochemistry)
AAA325943 at 1/100 staining Mouse brain tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

WB (Western Blot)
Western blot analysis of 293T using SIRT7 antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-SIRT7 antibody

Description: This gene encodes a member of the sirtuin family of proteins, homologs to the yeast Sir2 protein. Members of the sirtuin family are characterized by a sirtuin core domain and grouped into four classes. The functions of human sirtuins have not yet been determined; however, yeast sirtuin proteins are known to regulate epigenetic gene silencing and suppress recombination of rDNA. Studies suggest that the human sirtuins may function as intracellular regulatory proteins with mono-ADP-ribosyltransferase activity. The protein encoded by this gene is included in class IV of the sirtuin family. [provided by RefSeq, Jul 2008]

Function: NAD-dependent protein deacetylase that specifically mediates deacetylation of histone H3 at 'Lys-18' (H3K18Ac). In contrast to other histone deacetylases, displays selectivity for a single histone mark, H3K18Ac, directly linked to control of gene expression. H3K18Ac is mainly present around the transcription start site of genes and has been linked to activation of nuclear hormone receptors. SIRT7 thereby acts as a transcription repressor. Moreover, H3K18 hypoacetylation has been reported as a marker of malignancy in various cancers and seems to maintain the transformed phenotype of cancer cells. These data suggest that SIRT7 may play a key role in oncogenic transformation by suppresses expression of tumor suppressor genes by locus-specific deacetylation of H3K18Ac at promoter regions. Also required to restore the transcription of ribosomal RNA (rRNA) at the exit from mitosis: promotes the association of RNA polymerase I with the rDNA promoter region and coding region. Stimulates transcription activity of the RNA polymerase I complex. May also deacetylate p53/TP53 and promotes cell survival, however such data need additional confirmation.

Subunit Structure: Interacts with UBTF and the RNA polymerase I complex. Interacts with components of the B-WICH complex, such as MYBBP1A, SMARCA5/SNF2H and BAZ1B/WSTF. Interacts with ELK4, leading to stabilization at target promoters for H3K18Ac deacetylation. Interacts with histone H2A and/or histone H2B.

Post-translational Modifications: Phosphorylated during mitosis.

Similarity: Belongs to the sirtuin family. Class IV subfamily.

NCBI AND UNIPROT INFORMATION

NCBI GI #	7706712
NCBI GeneID	51547
NCBI Accession #	NP_057622.1
NCBI GenBank Nucleotide #	NM_016538.2
UniProt Accession #	Q9NRC8; Q3MIK4; Q9NSZ6; Q9NUS6; A8K2K0; B3KSU8
Molecular Weight	Observed: 45 kDa Predicted: 45 kDa
NCBI Official Full Name	NAD-dependent protein deacetylase sirtuin-7
NCBI Official Synonym Full Names	sirtuin 7

NCBI Official Symbol	SIRT7
NCBI Official Synonym Symbols	SIR2L7
NCBI Protein Information	NAD-dependent protein deacetylase sirtuin-7
UniProt Protein Name	NAD-dependent protein deacetylase sirtuin-7
UniProt Gene Name	SIRT7
UniProt Synonym Gene Names	SIR2L7

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/polyclonal/sirt7-antibody-immunohistochemistry-western-blot-elisa/325943>